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Botke, J.A.; Jansen, Paul; Khapova, S.N.; Tims, M.

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Work factors influencing the transfer stages of soft skills training: A literature review

Jolanda A. Botke*, Paul G.W. Jansen, Svetlana N. Khapova, Maria Tims

Vrije Universiteit Amsterdam, The Netherlands

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ABSTRACT

The transfer of training can be considered the Achilles heel of the training process. When trainees fail to use their new knowledge and skills on the job, training resources are wasted, and business results go unrealised. Research shows that the most problematic type of training transfer relates to soft skills training. To better understand the factors that influence the success of the transfer of soft skills training, we review studies published in top academic journals between 1988 and 2017. Our review reveals that three groups of work factors influence the post-training transfer of soft skills: job-related factors, social support factors, and factors related to the organisational facilitation of learning. The effects of specific factors vary by transfer stage. Our review also suggests that future research should devote more attention to the stages of transfer and consider both the behaviours of supervisors at each stage and the use of transfer-enhancing interventions.

1. Introduction

Although organisations invest billions of dollars in training every year, many trained competences reportedly fail to transfer to the workplace (Grossman & Salas, 2011). It is clear that the impact of training cannot be realised unless employees are both willing and able to use their new skills on the job (Jiang, Lepak, Han, et al., 2012). This 'transfer of training' is considered the Achilles heel of the training process. When trainees fail to use their new skills to improve performance, training resources are wasted and business results go unrealised (Chiaburu, Van Dam, & Hutchins, 2010), which leads to a waste of valuable time, energy and money for both organisations and their employees (Laker & Powell, 2011; Van der Locht, Van Dam, & Chiaburu, 2013; Volet, 2013). Despite the large investments in and potential benefits of training, organisational decision makers are often unsure of the extent to which employees perform differently once they have returned to work (Blume, Ford, Baldwin, & Huang, 2010; Mathieu, Tannenbaum, & Salas, 1992), and they also fail to understand how to optimise this transfer (Baldwin, Ford, & Blume, 2017).

Even more problematic is the transfer process of soft skills training. Soft skills refer both to intrapersonal skills, such as the ability to manage oneself, and to interpersonal skills, such as managing interactions with others (Laker & Powell, 2011). Although most training transfer research and theory assumes that training content is irrelevant to the success of the training transfer (e.g., Burke & Hutchins, 2007), some studies mention how the transfer of soft skills differs from the transfer of hard skills. For example, Laker and Powell (2011) link the transfer of soft skills to far transfer (whereas the transfer of technical skills, for example, is more related to near transfer because a trainee can 'mirror' the skills from the training in the work environment). 'The imprecision involved in the application of soft-skill training is due to the uncertainty involved in exactly what the trainee needs to know and in what contexts he or she needs to apply that learning' (Laker & Powell, 2011, p. 116). Massenberg, Schulte, and Kauffeld (2017) found that the mediating effect of motivation to transfer between supervisor support and training transfer appeared only after soft skills training and

* Corresponding author. De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands.
E-mail address: j.a.botke@vu.nl (J.A. Botke).

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not after hard skills training. Additionally, soft skills, and therefore the transfer of the results of soft skills training, are often more difficult to measure relative to functional skills in business areas such as finance, accounting, and marketing (Brown & Warren, 2009; Nijman, 2004). At the same time, across professional fields, employers agree that soft skills are increasingly important to employee mobility and success in the workforce (Carvalho & Roque, 2015; Deming, 2017; Griffith & Hoppner, 2013; Ibrahim, Boerhannoeddin, & Kazeem Kayode, 2017).

Research has addressed various factors that explain the success of the transfer. The influencing variables are traditionally divided into three broad categories: trainee characteristics, the design and content of the training programme, and the work environment (Baldwin & Ford, 1988). Although many factors influence transfer, the period after training seems to be most important in facilitating transfer (Hawley & Barnard, 2005). Only those employees who successfully apply their gained skills in the workplace (i.e., those who transfer their training) provide benefits to organisations through enhanced performance (Laker & Powell, 2011). Features of the work environment have been thought to be particularly important to post-training transfer (Baldwin & Ford, 1988; Tannenbaum & Yukl, 1992) because, while employees may be highly motivated individuals who have attended excellent training courses and are keen to use their new skills, constraints in the post-training work environment may prevent them from applying what they have learned in their jobs (Blume et al., 2010; Chiaburu, Sawyer, & Thoroughgood, 2010; Govaerts & Dochy, 2014; Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012; Tannenbaum & Yukl, 1992; Van der Locht et al., 2013). Kastenmüller et al. (2012) mention that a facilitating work environment is especially necessary for the transfer of soft skills training because these types of training and their transfer require the participation of colleagues and supervisors. Qualitative reviews have provided some evidence of the factors and interventions that can affect post-training transfer. However, these reviews have not examined how (e.g., which conditions, situations, or support behaviours) and when (in which transfer stage) these factors influence the transfer. Additionally, so-called transfer-enhancing interventions have been used to optimise the post-training transfer, but there is significant variability in the findings across the relevant studies and a lack of consistent support for particular transfer interventions (Blume et al., 2010). If we want to improve the training transfer of soft skills training, we need to understand both the post-training transfer process and the work factors that influence the process and results of post-training transfer.

With this literature review, we aim to bring clarity to this issue by reviewing and integrating findings regarding the effects of work factors on the post-training transfer of soft skills training. Specifically, we focus on answering the following question: *What is the influence of work factors on the transfer of soft skills training at different post-training transfer stages?* To do so, we first provide a stage model of the post-training transfer process by integrating previous reviews (Blume et al., 2010; Burke & Hutchins, 2007; Cheng & Hampson, 2008; Cheng & Ho, 2001; Grossman & Salas, 2011; Salas & Cannon-Bowers, 2001). We subsequently use this stage model to review the literature. To better understand the factors that influence the successful transfer of soft skills training, we review empirical studies published in academic journals between 1988 (which marks the publication of Baldwin and Ford's well-regarded review of the 'transfer problem' in training research) and 2017.

Our review reveals that three groups of work factors influence the transfer of soft skills: job-related factors, social support factors, and the organisational facilitation of learning. The effects of specific factors are found to vary by transfer stage, and some factors are mediated by transfer-enhancing interventions. We conclude this paper with suggestions for further research on the transfer of soft skills training. Such research will not only contribute to a better understanding of the transfer process but will also optimise transfer results in organisations.

2. Modelling the transfer process

To study the transfer of soft skills training, it is important to examine the total post-training transfer process and to clarify the transfer results at each stage. Blume et al. (2010) recommend training transfer researchers to increase the precision of their selection and reporting of transfer outcomes. How transfer is conceptualised and how and when it is measured are important (Blume et al., 2010). Furthermore, Gruber (2013) states that 'you have to be explicit about what kind of performance you have in mind when you seriously want to talk about transfer and about training' (Gruber, 2013, p. 97). This criterion problem has also been mentioned in other studies (Cheng & Ho, 2001; Knyphausen-Aufsess, Smukalla, & Abt, 2009). In line with Blume et al. (2010), De Rijdt, Stes, Van der Vleuten, and Dochy (2013) and Yelon, Ford, and Bhatia (2014), we conceptualise training-to-work transfer as transfer not only to the employee's job but also to the consequences of doing the job well, that is, of (changed) work behaviour leading to improved individual and organisational performances.

In our transfer model presented in Fig. 1, t0 represents the situation before the training (referring to the knowledge/skills, behaviours and/or performance of the trainee), and t1 represents the situation directly after the training. At t1, the trainee is supposed to have gained knowledge and skills but has used the new knowledge and skills only in the context of the training and not on the job; thus, there is not yet a change in work behaviour or work performance. It is clear that the influence of training cannot be realised unless employees are both willing and able to use their new skills on the job (Jiang, Lepak, Hu, & Baer, 2012). If the transfer is successful, measures at t2 indicate changes in work behaviour and work performance at the individual or organisational level. Whereas the main evaluation question during the training is 'Have you learned the new skills?' (learning perspective), the main question during the transfer is 'Did the training improve your performance?' (work perspective).

If we examine post-training transfer, four transfer stages can be identified as occurring in periods t1-t2. Stage 1, i.e., the motivation to transfer, is defined as the trainee's desire to apply the skills and knowledge gained during training to the workplace (Burke & Hutchins, 2007; Cheng & Hampson, 2008; Tracey, Tannenbaum, & Kavanagh, 1995). Motivation to transfer is expected to influence transfer behaviour (Cheng & Hampson, 2008). Stage 2 is the actual use of the trained skills in the workplace (Arthur, Bennett, Edens, & Bell, 2003; Blume et al., 2010; Cheng & Hampson, 2008; Grossman & Salas, 2011; Van den Bossche & Segers, 2013). The trainees

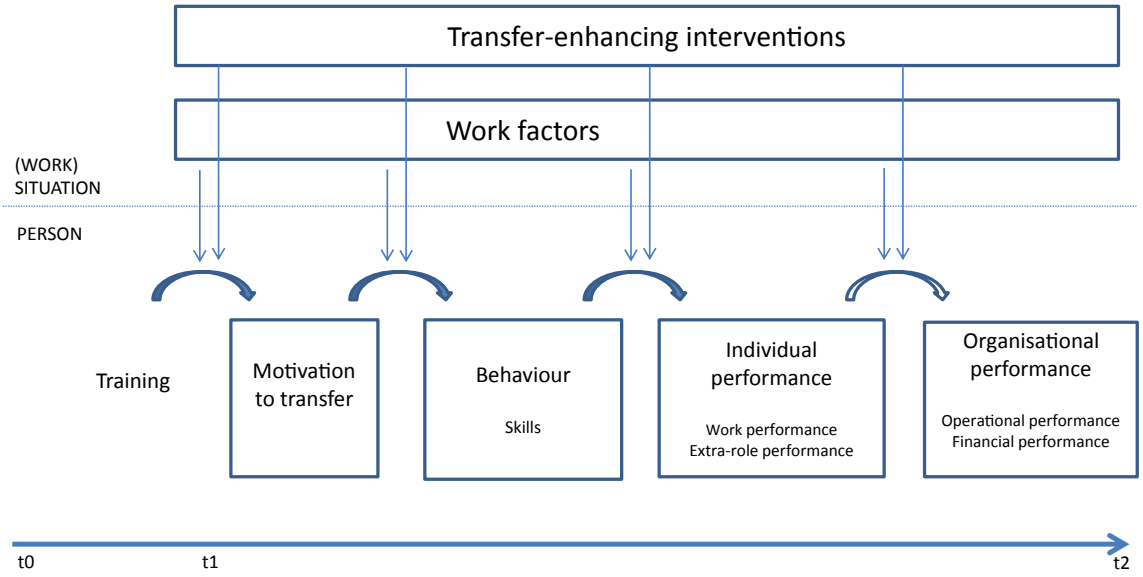

Fig. 1. Model of training transfer.

start to use the new behaviours. Some researchers distinguish between individual and collective use. Individual training transfer reflects the individual trainees' efforts to apply training content in their jobs. In turn, collective training transfer reflects the efforts of groups, such as work teams or units, to apply training content (Lee, Lee, Lee, & Park, 2014).

Stage 3 includes individual performance improvements (Cheng & Ho, 2001; Grossman & Salas, 2011; Salas et al., 2012; Taylor, Taylor, & Russ-Eft, 2009; De Grip & Sauermann, 2013). The trainee behaves according to a norm or a performance requirement that leads to improved job-specific or non-job-specific individual performance. Job-specific individual performance is also called work performance. Non-job-specific individual performance is also denoted as commitment performance or extra-role performance and includes, for example, demonstrating effort (see also Aguinis & Kraiger, 2009; Blume et al., 2010), efficacy, and emotional responses (Baumann, Gohm, & Bonner, 2011) and facilitating either peer and team performance or an improved social network (Van den Bossche & Segers, 2013). Individual performance might subsequently transfer into improved organisational performance (stage 4). This transfer from individual to organisational performance improvement is called vertical transfer (Aguinis & Kraiger, 2009; Nijman, 2004; Saks & Belcourt, 2006) or micro-to-macro transfer (Tharenou, Saks, & Moore, 2007). Organisational performance improvement includes both operational and financial outcomes. Operational outcomes are related to the goals of an organisational operation, including productivity, product quality, quality of service, and innovation. Financial outcomes reflect the fulfilment of the organisation's economic goals. Typical financial outcomes include sales growth, returns on invested capital, stock market outcomes and returns on assets (Jiang, Lepak, Hu, et al., 2012; Tharenou et al., 2007).

The model in Fig. 1 assumes that a transfer stage is influenced only by the preceding stage. Although some authors have studied the motivation to transfer as a prerequisite for behaviour (Axtell, Maitlis, & Yearta, 1997; Burke & Hutchins, 2008; Cheng & Hampson, 2008; Grossman & Salas, 2011; Knyphausen-Aufsess et al., 2009), to our knowledge, no research has addressed the full sequence of post-training effects on individual and organisational performance. The transfer outcomes of each stage are likely influenced by (different) factors in the work environment. These factors are the focus of our subsequent literature review. We now present our study.

3. Methodology

3.1. Literature search and selection criteria

To identify relevant studies for our review, we used a systematic review methodology (Tranfield, Denyer, & Smart, 2003). This approach aims to remove the subjectivity of data collection by using a predefined selection algorithm. As a starting point for our review, we choose the publication date of the review paper on training transfer by Baldwin and Ford (1988). Consequently, we identified papers concerned with the transfer of soft skills training published between 1988 and 2017. Our initial search in the Web of Science database included the keywords ‘transfer of training’ and ‘training transfer’. The keywords were used as selection criteria for *topic* and *title*. We selected only papers in *English*. This search resulted in an initial sample of 598 papers. After reading the abstracts, the pool was reduced to 139 papers. These references were loaded in EndNote, and then the complete articles were screened, heedful of the criteria for inclusion.

Studies were included or rejected based on their relevance. First, a study was considered relevant if it concerned the transfer of training to the workplace; therefore, a study had to relate to an employee sample in an organisational setting. We only included

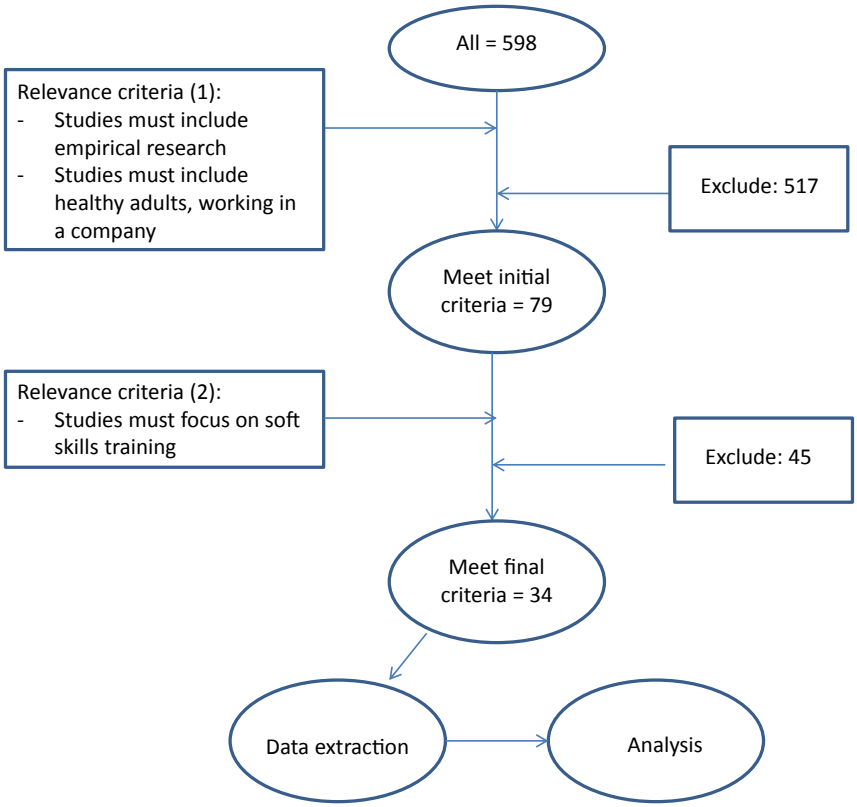

Fig. 2. Selection process.

empirical studies on healthy adult employees (we excluded studies on children, student and adults with medical problems, and studies on sport performance). Second, a study was considered relevant if it focused on soft skills training. We used Kantrowitz's categories of soft skills to identify these studies. She mentions ten categories of soft skills: (1) communication skills, (2) leadership skills, (3) decision making/problem solving skills, (4) self-management skills, (5) management skills, (6) organisation skills, (7) interpersonal skills, (8) political skills, (9) analysis/creativity skills, and (10) selling skills (Kantrowitz, 2005). We excluded all studies that did not focus on one of these skills. Our final sample included 34 empirical papers (see Fig. 2).

All of the reviewed papers were published between 1995 and 2017 (see Fig. 3) in 23 different journals. Although Fig. 3 reveals a small increase in the number of papers published on the transfer of soft skills in the last 10 years, many issues remain, and we attempt to refresh researchers' interest in the study of training transfer.

3.2. Analysis of the literature

First, we summarised the literature based on a range of characteristics: author(s), date of publication, type of soft skills, and duration of the training. We also summarised *how* the transfer results were measured and *when* they were measured (Blume et al., 2010).

Second, we grouped the papers according to the relevant *transfer stages*. Although we realise that there is a difference between motivation to transfer and intent to transfer, we have collapsed motivation and intent into one stage because they both concern pre-behaviour drives. While all of the studies measured transfer, it was not always clear which stage(s) the studies addressed. For example, some studies suggested that they measured performance. However, in reality, they measured only whether or how often skills are used in the workplace (i.e., work behaviour) (Antle, Barbee, & Van Zyl, 2008; Axtell et al., 1997; Lee et al., 2014). To decide whether a paper concerned behaviour or performance, studies that collected data through questionnaires were searched for their measurement items. In qualitative studies, the authors looked for the ways in which the transfer results were uncovered (e.g., interview questions, coding schemes). If only the use of skills was measured, we included the study in stage 2, i.e., the use of trained skills. If the use included a norm or performance rating, the study was included in stage 3, i.e., individual performance improvement. De Rijdt et al. (2013) also used this distinction but called it 'a use measure' and 'an effectiveness measure'. In their study on a manager's training of five Canadian national sport organisations, Millar and Stevens (2012) suggested they measured organisational performance. However, the example item for organisational performance was 'understanding how risk management can be applied to the organisation'. Therefore, we did not include this study under organisational performance (we included this study under individual performance because of other measures). We checked for studies that measured more than one transfer stage.

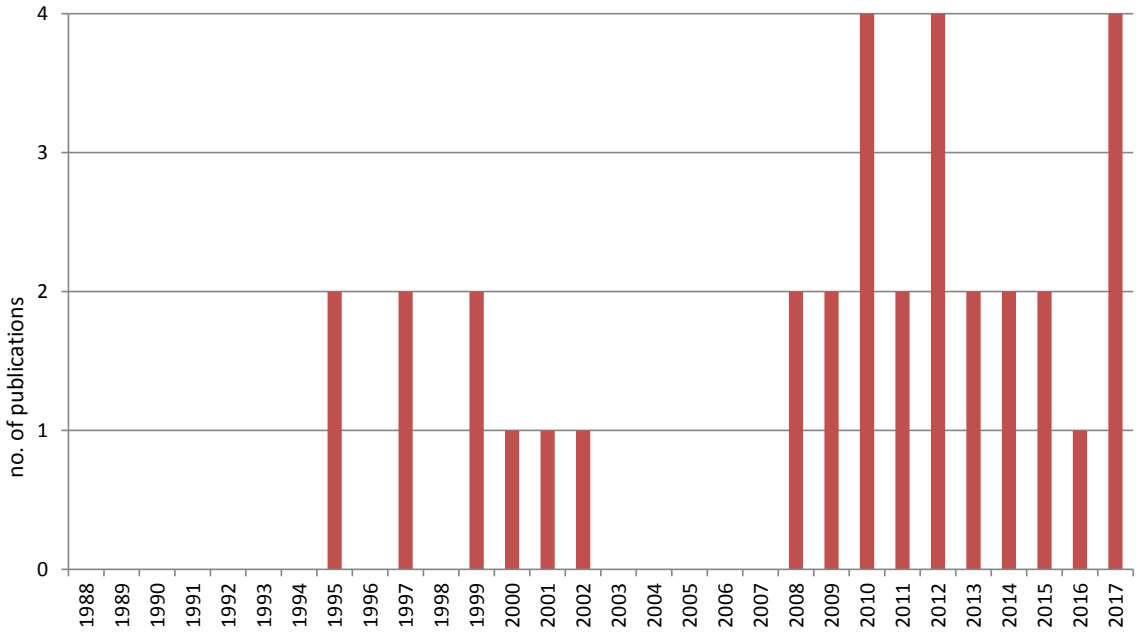

Fig. 3. Publications per year (1988–2017).

Third, we examined the papers on *work factors*. 'Work factors' refer to any influence(s) on transfer in the work environment that exist or occur outside the training itself (Burke & Hutchins, 2007). Based on earlier reviews from Knyphausen-Aufsess et al. (2009); Salas and Cannon-Bowers (2001); Cheng and Ho (2001); and Cheng and Hampson (2008), we worked with three groups of work factors: job-related work factors, social support variables, and the organisational facilitation of learning.

Based on both the abovementioned reviews and other transfer studies, we found several work factors per group that could influence transfer. Job-related work factors include job relevance (Burke & Hutchins, 2008; Knyphausen-Aufsess et al., 2009; Taylor et al., 2009), job or task autonomy, and workload (Aguinis & Kraiger, 2009; Clarke, 2013; Nijman, 2004). Social support is believed to play a central role in the transfer process (Govaerts & Dochy, 2014; Tracey et al., 1995) and includes the attitudes and actions of supervisors, subordinates, and peers towards the training and learned skills (Salas & Cannon-Bowers, 2001). The third group of work factors includes the organisational facilitation of learning. Earlier research has confirmed the importance of the organisational learning climate for post-training transfer (e.g., Baldwin & Ford, 1988; Burke & Baldwin, 1999; Tracey et al., 1995; Tziner, Fisher, Senior, & Weisberg, 2007). We used the learning climate scale of Nikolova, Van Ruysseveldt, De Witte, and Van Dam (2014) to categorise our review results in this category. These authors used the following three dimensions to measure learning climate: a facilitation learning climate, an appreciation learning climate, and an error-avoidance learning climate.

Finally, we analysed papers on *transfer-enhancing interventions* that focused on identifying both the barriers that hinder the application of learned skills in the work environment and the trainees' plans to overcome those barriers (Sookhai & Budworth, 2010). Three types of interventions have been studied: goal-setting, relapse prevention (including self-management), and programme-framing (i.e., optimistic previews). Goal-setting is based on a theory of employee motivation regarding task performance (Morin & Latham, 2000). The theory states that if an employee has the requisite ability, then a difficult, specific goal not only influences the employee's subsequent behaviour through choice, effort, and persistence but also affects behaviour cognitively through the search for knowledge of ways to achieve the goal (Morin & Latham, 2000; Shantz & Latham, 2012). Goal-setting interventions involve either the actual setting of goals with regard to the implementation of new knowledge, skills and attitudes on the job or the teaching of how to set such goals (Nijman, 2004). Relapse prevention is a self-management technique (also called self-management training) by which individuals can become aware of environmental and intrapersonal threats to skill maintenance to anticipate, prevent, and recover from possible lapses into 'old' behaviours (Burke & Baldwin, 1999; Marx, 1982). The focus is to promote the transfer of training by 'immunising' learners against environmental obstacles to transfer through heightened awareness, group problem-solving, realistic goal-setting, and simulating the necessary coping skills (Milne, Westerman, & Hanner, 2002). Finally, the third type of transfer-enhancing intervention is programme-framing through (for instance) optimistic previews. This type of intervention includes activities that are expected to lead to a more positive perception of the organisational climate, which in turn may increase transfer (Kastenmüller et al., 2012).

Table 1 provides an overview of results of the analysis.

Table 1
Stages of transfer of soft skills training, work factors and transfer-enhancing interventions.

Studies only focusing on motivation to transfer

Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
						Job factors	Social support	Learning climate	
Al-Eisa et al. (2009)	Various hard and soft skills (e.g. negotiation skills)	3,5 day	287	Self	Before < 2 w		Supervisor +		
Chiaburu, Van Dam, *et al.* (2010)	Service improvement skills	*	111	Self	< 2 w 2-6 w 6 w - 3 m		Supervisor +	Facilitation +	
Hutchins et al. (2013)	Leadership skills	*	235	Self	< 2 w	Job relevance 0	Supervisor 0 Peer 0	Appreciation 0	
Kastenmüller et al. (2012)	Communication and leadership skills	1 day	147	Self	< 2 w			Error-avoidance - (after OP)	OP +
Massenberg et al. (2017)	Management skills	4 days	353	Self	Before < 2 w		Supervisor 0 Peer +		

Studies only focusing on use of trained skills

Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
						Job factors	Social support	Learning climate	
Antle et al. (2008)	Supervisory skills	5 days	72	Self Subordinates	Before < 2 w 2-6 w		Supervisor + Peers 0	Facilitation +	
Antle et al. (2010)	Team building skills	2,5 day	163	Self	Before < 2 w 3-6 m		Supervisor 0 Peers 0		
Burke and Baldwin (1999)	Employee coaching skills	0,5 day	78	Self Subordinates	< 2 w 2-6 w			Facilitation/appreciation + (after RP)	RP +
Chiaburu, Van Dam, *et al.* (2010); Chiaburu, Sawyer et al., 2010	Personal development skills	1-2 days	71	Self Supervisor	6 w - 3 m				
Clarke (2002)	Risk assessment skills	2 days	14	Self	Before < 2 w 3-6 m	Workload +	Supervisor 0		
Ladyshewsky and Flavell (2012)	Leadership skills	20 weeks	10	Self	6 m–1 y	Workload +			
Richman-Hirsch (2001)	Customer service skills*	*	267	Supervisors Peers	2-6 w			Appreciation + (after G) Appreciation 0 (after RP)	G + RP 0
Stenling & Tafvelin (2016)	Leadership skills	6 days	121	self	Before < 2w 6m-1y			Facilitation 0 (for near transfer) Facilitation + (for far transfer)	

(*continued on next page*)

Table 1 (*continued*)

Studies only focusing on motivation to transfer									
Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
						Job factors	Social support	Learning climate	
Tracey et al. (1995)	Basic supervisory skills	3 days	104	Self Supervisor	Before 6 w – 3 m			Facilitation + Appreciation +	
Studies only focusing on individual performance improvement									
Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
						Job factors	Social support	Learning climate	
Bennett et al. (1999) *Work performance*	Teamwork skills	*	564	Self	Unclear**		Supervisor + Peers +	Appreciation +	
Deane et al. (2014) *Work performance*	Personal leadership skills	2 days	188	Company data	Before 3-6 m 6 m–1 y				G +
Facteau et al. (1995) *Work performance*	Management skills	*	967	Self	Unclear**		Supervisor – Peers + Subordinates +	Appreciation 0	
Frisque and Kolb (2008) *Work performance*	Ethical skills	6 h	91	Self	Before < 2 w 3-6 m				
Ibrahim et al. (2017) *Work performance*	Soft skills	2 + 2 + 1 days	260	Self Supervisor	Before < 2 w				
Johnson et al. (2012) *Extra-role performance*	Leadership skills	5 days	294	Self Supervisors Peers Subordinates	3-6 m				G +
Kylesten and Nahlinder (2011) *Extra-role performance*	Decision making skills	2 days	7	Project leader Instructor	< 2 w				
Martin (2010) *Work performance*	Management skills	12 weeks	237	Supervisor	Before 2-6 w 3-6 m		Peers +	Facilitation +	
Millar and Stevens (2012) *Work performance*	Risk management skills	2 days	22	Self	Before < 2w 3-6m			Facilitation 0	
Studies only focusing on organisational performance improvement									
Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
						Job factors	Social support	Learning climate	
Voegtlin et al. (2015)	Personal mastery skills	3 days	2638	Self	Unclear**	Autonomy 0			

(*continued on next page*)

Table 1 (*continued*)

Studies only focusing on motivation to transfer									
Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
						Job factors	Social support	Learning climate	

Studies focusing on motivation to transfer and use of trained skills									
Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***			Transfer-enhancing interventions****
Axtell et al. (1997)	Interpersonal skills	*	75	Self Supervisor	< 2 w 2-6 w > 1 y	Job relevance + Autonomy +	Supervisor 0	Error-avoidance 0	
Lee et al. (2014)	Leadership skills	*	365	Self	Unclear**		Supervisor + Peer + (MtT) Peer 0 (use)	Facilitation 0	
Massenberg et al. (2015)	Reflectivity skills	1 day	45	Self	2-6w		Supervisor + Peer +		
Seiberling and Kauffeld (2017)	Leadership skills	2 days	287	Self	< 2 w 6 w-3 m		Supervisor +		
Van der Locht et al. (2013)	Social skills for managers	2-10 days	595	Self	Unclear**	Job relevance +			

Studies focusing on use of trained skills and individual performance improvement							
Study	Type of soft skills	Duration of training	Sample size	Rating source	Time of measurement	Work factors ***	Transfer-enhancing interventions****
Brown and Warren (2009) *Extra-role performance*	Self-awareness	*	89	Self Peers	< 2 w 6 m–1 y		G+
Morin and Latham (2000) *Extra-role performance*	Interpersonal communication skills	1 day	41	Self Peers	2-6 w 3-6 m		
Olivero et al. (1997) *Work performance*	Managerial skills	3 days	31	Self	Before < 2 w 6 w – 3 m		G +
Sparr et al. (2017) *Work performance*	Leadership skills	*	60	Self	Unclear**		
Tuleja and Roberts (2011) *Extra-role performance*	Management communication skills	4 days	720	Self Supervisor	Unclear**	Job relevance +	

Notes

* For some training programs, the duration of the training was either unclear or not mentioned.

**Some studies measure transfer by gathering data on all employees who have attended training during a certain time period (e.g., one year). In this situation, the time delay between the training and the result measure is unclear.

***+ = Positive impact on transfer results, 0 = No impact on transfer results, - = Negative impact on transfer results.

****OP = Optimistic previews, RP = Relapse prevention, G = Goal-setting.

4. Results

4.1. The post-training transfer process

To improve the training transfer of soft skills training, we first need to understand the post-training transfer process. Empirical studies were found for each of the transfer stages. The studies addressed a broad range of soft skills training, such as communication (e.g., Kastenmüller et al., 2012; Morin & Latham, 2000), leadership (e.g., Facteau, Dobbins, Russell, Ladd, & Kudisch, 1995; Martin, 2010; Seiberling & Kauffeld, 2017; Stenling and Tafvelin, 2016), coaching (Burke & Baldwin, 1999), teambuilding (Antle, Frey, Sar, Barbee, & Van Zyl, 2010), decision making skills and risk management (Kylesten & Nahlinder, 2011; Millar & Stevens, 2012) and ethical skills (Frisque & Kolb, 2008). The sample sizes ranged from 7 to 2638, and 41% of the studies had a sample size of more than 200. Most of the studies collected data through questionnaires (26 of 34 studies). Eight studies (also) used qualitative data.

Among the 34 studies, 15 addressed performance outcomes. Where performance was measured, it was conceptualised as individual-level performance, with the exception of the study by Voegtlin, Boehm, and Bruch (2015), who also measured organisational performance. Some trainings were very brief (one day or less; Burke & Baldwin, 1999; Frisque & Kolb, 2008; Massenberg, Spurk, & Kauffeld, 2015). According to Taylor et al. (2009), this issue influences transfer results. In their meta-review, Taylor et al. (2009) studied the influence of the length of training on the effect size (measured as the difference between post-test and pre-test scores regarding on-the-job behaviour after training divided by the pre-test standard deviation). These authors found that for short managerial training (one day or less), the effect sizes were small (within a range of 0.13 for self-ratings to 0.34 for supervisor ratings). Long programmes (more than five days) were found to have modest effects (Taylor et al., 2009). There was a predominant orientation towards self-reports; 27 of the 30 studies used self-reports, and 16 studies used *only* self-reports.

Some studies measured only near transfer (i.e., immediately after the training programme), while other studies (also) measured far transfer (i.e., one year after the training). Taking a minimum time lapse of three months between training and impact measure as suggested by Cheng and Ho (2001), of the 29 studies that measured behaviour and/or performance, only 14 included a measure after three months or more (this minimal time lapse should allow trainees adequate opportunities to use newly learned skills and allow raters adequate observational opportunities).

Finally, ten papers studied two stages of the transfer process. Of these ten papers, five papers included the stages 'motivation to transfer' and 'use of trained skills'. Four of these five studies found that motivation to transfer was positively related to the use of new skills after training (Axtell et al., 1997; Massenberg et al., 2015; Seiberling & Kauffeld, 2017; Van der Locht et al., 2013). Moreover, five papers included the stages 'use of trained skills' and 'individual performance improvement'. However, only two papers reported a positive relationship between the use of trained skills and individual performance improvement (Morin & Latham, 2000; Sparr, Knipfer, & Willems, 2017).

In sum, empirical studies were found for each of the transfer stages. Only ten studies included more than one stage. We found only one study that included a measure of organisational performance. Holton (2005) mentioned that 'there has been almost no research on factors influencing the transfer of individual performance into organisational performance' (Holton, 2005, p. 49). These findings suggest that the full sequence of effects after training on individual and organisational performance has not yet been studied.

4.2. Work factors per transfer stage

To improve the training transfer of soft skills training, we need to understand not only the post-training transfer process but also the factors that influence each of the transfer stages.

4.2.1. Stage 1: motivation to transfer

All ten of the studies that focused on motivation or intent to transfer addressed the influences of work factors on the motivation or intent to transfer. In this transfer stage, the job-related factors of job relevance and autonomy are related to the motivation to transfer. For example, Axtell et al. (1997) studied the effects of job relevance (how useful the content of the training is for doing a job) and autonomy (how much autonomy the employee has to implement new skills) on the transfer of an interpersonal skills training and found that both were key variables in determining the level of motivation to transfer. Motivation to transfer is also related to the social support factors of supervisor support and peer support. For example, Chiaburu, Van Dam et al., (2010) found a positive relationship between social support from the supervisor and motivation to transfer. Moreover, other studies found positive relationships between supervisor support and motivation to transfer (Al-Eisa, Furayyan, & Alhemoud, 2009; Lee et al., 2014; Massenberg et al., 2015; Seiberling & Kauffeld, 2017). Lee et al. (2014) found that peer support had a significant effect on motivation to transfer skills from a leadership programme in a large Korean insurance firm. Motivation to transfer is also influenced by a 'facilitating' learning climate. For example, Chiaburu, Van Dam et al. (2010) found that perceived organisational support enhanced trainees' motivation to transfer the skills learned in a service improvement programme. One study addressed transfer-enhancing interventions (Kastenmüller et al., 2012) and found that trainees who were asked to write down positive (vs. negative) aspects of their training reported a more positive perception of the openness of the climate and, in turn, increased motivation to transfer. A perceived (negative) organisational climate mediates the effect of optimistic previews on motivation to transfer.

In sum, positive relationships have been found between motivation to transfer and job relevance, autonomy, supervisor support, peer support, and a facilitating learning climate. In other words, if new soft skills are to be transferred to the workplace, a first stage is being motivated to transfer. For this motivation to transfer, it is important that trainees feel that the course is relevant to their jobs, perceive that they have the autonomy to implement the new behaviour, receive support from supervisors and peers and perceive that

the organisation facilitates their learning. Optimistic previews seem to increase motivation to transfer (but only one study was found on this relation).

4.2.2. Stage 2: use of trained skills

Nineteen of the 34 empirical studies included in the review focused on the use of skills. However, only 15 of these 19 studies addressed the influence of work factors on the use of skills. The job-related factors of job relevance (utility), autonomy, and workload are positively related to individual skill use. For example, Clarke (2002) found that a lower workload improved the use of new skills after training on care management skills. Van der Locht et al. (2013) found that expected utility was related to individual skill use after management training. Axtell et al. (1997) found positive relationships between autonomy and the use of skills after training courses aimed at developing interpersonal skills at work at a multinational organisation. Furthermore, the use of new skills after training is influenced by supervisor support. For example, Antle et al. (2008) found that supervisor support had a positive influence on the use of new skills in the workplace. Massenberg et al. (2015) found positive relationships of individual supervisor support, team supervisor support and peer support with the use of trained skills after team training in reflectivity skills among blue-collar workers in an automotive supply company in Germany.

The use of new skills has also been found to be associated with a facilitating learning climate. For example, Antle et al. (2008) found that a facilitating learning culture was positively related to the transfer results for supervisory training for welfare professionals. Additionally, the use of new skills has been found to be related to an appreciating learning climate. Stenling and Tafvelin (2016) found that a facilitation learning culture predicted far transfer (i.e., 1 year after the training programme) for a leadership development programme among organisational leaders in Swedish sports clubs.

Two studies in the sample address the relationships between the use of skills, an organisational learning climate and transfer-enhancing interventions (goal-setting and relapse prevention). Richman-Hirsch (2001) examined the effect of goal-setting and self-management training on customer service skills. Her findings indicate that training in goal-setting is effective in improving the extent to which trainees apply their new skills to the job. Further, goal-setting has been found to be more effective in supportive work environments. Burke and Baldwin (1999) studied the effects of two relapse prevention (RP) modules that were designed to supplement a training programme on trainee coaching skills. Their research suggests that there is less of a need for RP tools when the transfer climate becomes more supportive. Using a full RP intervention in a favourable transfer climate may even have a negative effect on transfer.

In sum, scholars have found that job relevance, workload, autonomy, supervisor support, peer support, a facilitating learning climate, and an appreciating learning climate are positively related to the use of new skills after training. In other words, for the use of new soft skills after training, it is important that trainees feel that the training is relevant to their jobs and perceive that they have the autonomy to use the new skills, that the workload allows for attempts to use the new skills, that supervisors and peers support the transfer, and that the trainees feel that the organisation facilitates and rewards their learning. Additionally, goal-setting and relapse prevention have been found to be positively related to the use of new skills and to interact with some of the work factors.

4.2.3. Stage 3: individual performance

Fourteen of the 34 empirical studies included in the review focus on individual performance, of which five studies focus on extra-role performance, and nine studies focus on work performance. Only five of the studies included in this stage have examined whether the relationship between training and individual performance is mediated by work factors.

Focusing on the positive relationship between work factors and individual performance after training, we see that one study found that job relevance is positively related to extra-role performance. Tuleja and Roberts (2011) found a positive relationship between job relevance and extra-role performance improvement (communication effectiveness) after management communication training. The 14 studies included no information about the influence of job-related factors (job relevance, autonomy and workload) on the relationship between training and work performance.

The findings on the influence of social support on work performance after training are mixed. One study found a negative relationship between supervisor support and individual performance and a positive relationship of peer support and subordinate support with individual (work) performance after training (Facteau et al., 1995). Bennett, Lehman, and Frost (1999) studied the influence of peer and supervisor support on the transfer of teamwork skills and found that both supervisor and peer support were important for work performance. No relationship was found between social support and improvement in extra-role performance after training.

Two studies included the relationship between organisational support of learning and work performance after training. Bennett et al. (1999) found that trainees who felt blocked from applying their training reported significantly less customer orientation after the training than untrained employees, whereas those who reported a helpful learning culture reported significantly more customer orientation after the training than the untrained group. Martin (2010) found that trainees in a division with a more favourable climate exhibited greater improvement after management skills training. Additionally, peer support mitigated the effects of a negative climate.

Four studies included transfer-enhancing interventions. All four included goal-setting (no work factors were included in these studies). For example, Johnson, Garrison, Hernez-Broome, Fleenor, and Steed (2012) examined the relationship between goal-setting and training transfer after a 5-day leadership development programme. Their research suggested that leaders who set multiple goals were perceived as having improved more across competences than leaders who set only one goal (Johnson et al., 2012). Morin and Latham (2000) also studied the effect of goal-setting on the transfer of supervisors' communication training. Their research demonstrated significantly higher self-efficacy among supervisors who engaged in either mental practice or in mental practice

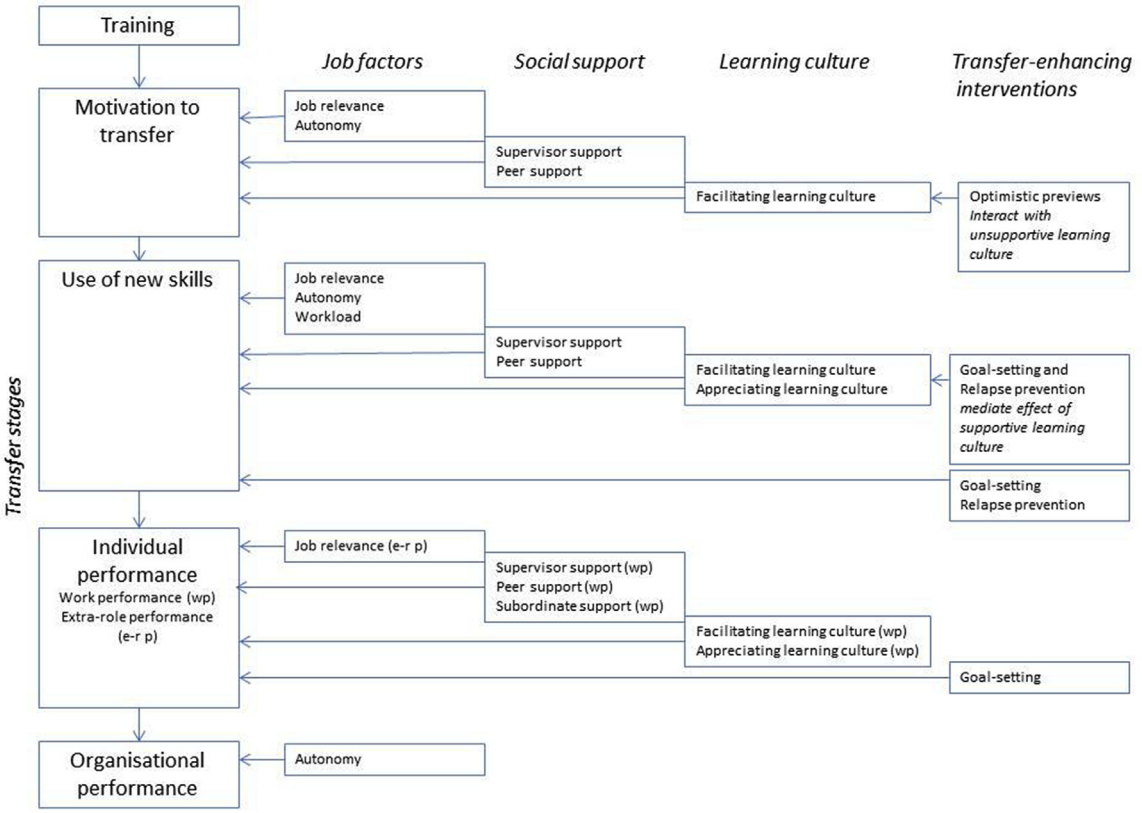

Fig. 4. Overview of positive relations found between post-training transfer stages, work factors and TEI.

combined with goal-setting than among supervisors in the goal-setting only or control conditions. Deane, Adresen, Crowe, Oades and Chiarrochi (2014) studied the effect of coaching that included goal-setting on the transfer of service-provision training for medical staff. These authors found that training followed by the goal-setting intervention led to significant sustained improvements in the quality of care planning.

In sum, positive relationships are found between extra-role performance improvement and job relevance; between work performance improvement and supervisor support (but not in all studies), peer support, and subordinate support; and between work performance improvement and a facilitating learning culture and work performance and an appreciating learning culture. In other words, job relevance is important for improving extra-role performance after soft skills training. To improve work performance after soft skills training, support from supervisors, peers and subordinates is important, and the trainees should feel that the organisation facilitates and rewards their learning. Goal-setting could have a positive influence on this transfer stage (on both work performance and extra-role performance).

4.2.4. Stage 4: organisational performance

Only one of the 34 empirical studies included in the review focused on organisational performance. Voegtlin et al. (2015) studied the transfer of skills after a three-day empowerment programme in a Swedish multinational company specialising in power and automation technologies. These authors assessed collective empowerment at the work-unit level of analysis and found that the training did not significantly relate to the perceived autonomy of the work units. No transfer-enhancing interventions were included in this study.

Fig. 4 provides an overview of all of the relationships found between transfer stages, work factors and transfer-enhancing interventions.

5. Discussion

5.1. The relevance of transfer stages

This paper's purpose was to explore the effects of work factors on the transfer of soft skills training. Specifically, we focused on answering the following question: *What is the influence of work factors on the transfer of soft skills training at different post-training transfer stages?* To answer this question, we conducted a systematic literature review involving 34 empirical studies published in academic journals between 1988 and 2017. We used a stage model to analyse these papers. The stage model included four stages of

transfer: motivation to transfer, use of new behaviours in the work setting, individual performance improvement and improvement of organisational performance. Our results also show that the impact of work factors differs by stage. Therefore, it is relevant to distinguish between the transfer stages if we want to understand how to optimise the transfer results of soft skills training.

We found only one study on the relationship between soft skills training and organisational performance improvement, and this study found no positive relationships between training and performance improvement (Voegtlin et al., 2015). No studies were found on the relationship between training and financial organisational outcomes. Based on a meta-analysis of 67 studies, Tharenou et al. (2007) suggest that training is positively related to human resource outcomes and organisational performance but is only very weakly related to financial outcomes. These authors also suggest that training leads to organisational-level outcomes to the extent that it results in the acquisition of the skills, behaviours, and performance necessary to achieve desired organisational outcomes. In line with Tharenou et al. (2007), we propose a transfer model with a direct link between soft skills training and individual transfer outcomes (behaviour and performance) and with an indirect link between training and organisational performance at an operational level.

5.2. The relevance of work factors

Based on earlier reviews (Cheng & Ho, 2001; Knyphausen-Aufsess et al., 2009; Salas & Cannon-Bowers, 2001), we worked with three groups of work factors that may influence the transfer of soft skills training: job-related factors, social support variables, and the organisational facilitation of learning. The first group of factors, i.e., job-related factors, include more individually oriented variables (i.e., workload, job-relevance, and autonomy). The second group of factors is related to the social environment of the trainee. The third group of factors focuses on the learning culture in the organisation. We found that different work factors influence each transfer stage and that the effects of specific factors vary by transfer stage. For example, workload seems to be particularly relevant to the use of new skills on the job (Clarke, 2002; Ladyshewsky & Flavell, 2012), job relevance is relevant in all transfer stages (e.g., Tuleja & Roberts, 2011; Van der Locht et al., 2013), and autonomy is important both for motivation to transfer and for the use of new skills (Axtell et al., 1997). Supervisory support and peer support are important in all transfer stages (e.g., Bennett et al., 1999; Lee et al., 2014; Olivero, Bane, & Kopelman, 1997). A facilitating learning climate is positively related to the motivation to transfer (Chiaburu, Van Dam, et al., 2010), the use of new skills (Antle et al., 2008; Burke & Baldwin, 1999; Tracey et al., 1995), and work performance (Martin, 2010), whereas an appreciative learning culture is positively related to the use of new skills (Burke & Baldwin, 1999; Tracey et al., 1995) and work performance (Bennett et al., 1999). A question that arises from these results is whether trainees can differentiate between the communication with their direct social environment (supervisors and peers) and the organisational learning culture. Most of the time, the behaviours of the supervisor and peers will mirror the organisational learning culture. For example, in a study of store employees, Eisenberger, Rhoades, and Cameron (1999) found that job autonomy was positively related to perceived organisational support, which has been found to have a close relationship with perceived supervisor support. This raises another question, namely, whether some (groups of) factors are more important than others or precede each other. In their Learning Transfer System Inventory (LTSI), Holton, Bates, and Ruona (2000) present an instrument that measures and compares different factors affecting the transfer of learning. The instrument includes work factors (e.g., peer support and performance support) as well as other factors that influence transfer (e.g., learner readiness and personal capacities for transfer). This work has been translated into multiple languages, and the scales have been used in many studies (e.g., Hutchins & Burke, 2006; Massenberg et al., 2017; Massenberg et al., 2015). The broad range of measures included in the LTSI makes it possible to compare the relative weights of factors that influence transfer. However, most measures of the LTSI might be too global (e.g., the measure for supervisors includes only three items) to pinpoint exactly how work factors influence post-training transfer, which makes the instrument relevant for a first diagnosis but not suitable for determining exactly how work factors could be modified to influence post-training transfer. Moreover, the LTSI model gives no indication of interactions between the factors (Kirwan & Birchall, 2006).

5.3. Different supervisor behaviours in different stages

The literature indicates that the support of the supervisor is critical for an employee to apply the competences developed during a training programme on the job (Govaerts & Dochy, 2014; Nijman, Nijhof, Wognum, & Veldkamp, 2006). In our review, some studies found a positive relationship between supervisor support and the post-training transfer results of soft skills training (Al-Eisa et al., 2009; Antle et al., 2008; Bennett et al., 1999; Chiaburu, Van Dam, et al., 2010, Lee et al., 2014; Massenberg et al., 2015; Seiberling & Kauffeld, 2017), whereas others found no relationship (Antle et al., 2010; Axtell et al., 1997; Clarke, 2002; Hutchins, Nimon, Bates, & Holton, 2013; Massenberg et al., 2017). One study found a negative relationship between supervisor support and work performance (Facteau et al., 1995). According to Govaerts and Dochy, 'discrepancies in the results are conceivably due to different ways in which the construct of supervisor support has been conceptualised and subsequently operationalised in the different studies' (Govaerts & Dochy, 2014, p. 79). Based on a review study, Govaerts and Dochy defined 24 specific behaviours and attitudes that a supervisor can adopt to support training transfer. When we compared the measures of supervisor support in our review with the 24 behaviours and attitudes specified by Govaerts and Dochy, we found that in four of the 13 studies that included measures of supervisor support, supervisor support behaviours were either unclear or could not be identified (Antle et al., 2008, 2010; Bennett et al., 1999; Clarke, 2002). The other nine studies included ten different types of supervisor support behaviours. Table 2 presents an overview of the behaviours identified in our review studies. For example, Al-Eisa et al. (2009) and Chiaburu, Van Dam et al. (2010) both found a positive relationship between supervisor support and the motivation to transfer, but they used different constructs to measure supervisor support. Al-Eisa et al. measured whether a supervisor encourages the use of training on the job, openly values trainees' participation in training and gives trainees rewards for the use of training on the job. However, Chiaburu and Van Dam et al.

Table 2
Supervisor support split up into specific behaviours.

Study	Stage	Supervisor support	Categories of supervisor support (Govaerts & Dochy, 2014)*										
			Coaching and learning transfer	Discuss application	Encouragement	Goal setting	Informal reinforcement	Interest in training content	Opportunities to practice and apply	Positive attitude towards training	Practical support	Rewards	
Al-Eisa et al. (2009)	Motivation to transfer	+			x					x		x	
Antle et al. (2008)	Use of skills	+											**
Antle et al. (2010)	Use of skills	0											**
Axtell et al. (1997)	Motivation to transfer Use of skills	0			x								
Bennett et al. (1999)	Work performance	+											**
Chiaburu, Van Dam, *et al.* (2010)	Motivation to transfer	+		x							x		
Clarke (2002)	Use of skills	0											**
Hutchins et al. (2013)	Motivation to transfer	0	x	x		x	x	x					
Facteau et al. (1995)	Work performance	–	x				x		x				
Massenberg et al. (2015)	Motivation to transfer Use of skills	+	x	x		x	x	x					
Massenberg et al. (2017)	Motivation to transfer	0	x	x		x	x	x					
Lee et al. (2014)	Motivation to transfer Use of skills	+		x					x			x	
Seiberling and Kauffeld (2017)	Motivation to transfer Use of skills	+	x	x		x	x	x					

Notes:
*Govaerts and Dochy (2014) describe 24 behaviours, but only 10 of them could be identified in our studies.
**For these studies, the type of behaviour was unclear or could not be identified.

measured whether a supervisor discusses the use of training on the job with trainees and provides trainees with resources and practical support (e.g., time, money, and practical tools) to practice and apply new soft skills. From Table 2, the difference between the positive relationship between supervisor support and work performance found by Bennett et al. (1999) and the negative relationship found by Facteau et al. (1995) can be explained by the fact that they construed support differently. Bennett et al. measured how supervisors' 'attitudes and way of doing things' both pre-training and post-training block or enable transfer. Facteau et al. used a 10-item scale that measured only the post-training activities of supervisors. Their measures focused on how well supervisors provide and support opportunities for trainees to practice new skills. Accordingly, regarding supervisor support, specific behaviours seem to be important during transfer.

5.4. Transfer-enhancing interventions are mediated by work factors

Transfer-enhancing interventions (goal-setting, relapse prevention and using optimistic previews) are positively related to transfer outcomes (Brown & Warren, 2009; Burke & Baldwin, 1999; Kastenmüller et al., 2012; Olivero et al., 1997; Richman-Hirsch, 2001). However, it remains unclear why and how these interventions influence transfer. For example, Richman-Hirsch (2001) suggests that the perception of the work environment moderates the effectiveness of post-training interventions on transfer. She found that both goal-setting and self-management training were more effective in supportive work environments. The tendency of the post-training transfer intervention literature to ignore mediator variables is mentioned in several studies (Hutchins & Burke, 2006; Rahyuda, Syed, & Soltani, 2014; Richman-Hirsch, 2001). In their review study on the effect of relapse prevention, Hutchins and Burke (2006) mention self-efficacy as a possible mediator between relapse prevention and transfer outcomes. Sookhai and Budworth (2010) mention the relationship between self-efficacy and environmental factors. These authors found that the transfer climate mediated the relationship between self-efficacy and the transfer of training. According to their study, the success of transfer-enhancing interventions is largely attributable to the fact that such interventions increase self-efficacy for the application of the skills learned in training because 'a similar feature of all those interventions is that they ask the trainee to consider barriers that might be encountered during the application of learned skills and to develop a plan for overcoming such barriers' (Sookhai & Budworth, 2010, p. 269). Morin and Latham (2000) note that mental practice is effective not only because it increases the amount of practice of the skills that are taught during training but also because it implicitly includes goal-setting, which in turn, increases self-efficacy with regard to applying training on the job. When studying the effect of transfer-enhancing interventions, it is relevant to include mediator variables. We propose including organisational culture and self-efficacy as mediator variables.

5.5. Study limitations

This study has limitations that should be noted. First, we did not include the relationship between needs assessment and transfer in this review because this relationship primarily impacts the training design (i.e., determining what the trainee already knows and training them accordingly). Second, in this study, we included only research on post-training transfer. However, the authors of several of the reviewed papers signalled the relevance of considering pre-training transfer (Grossman & Salas, 2011; Salas et al., 2012; Whitener & Brodt, 1994), during which pre-training motivation (Govaerts & Dochy, 2014), the relationship between pre-training motivation to learn and post-training motivation to transfer (Chiaburu & Lindsay, 2008; Smith-Jentsch, Jentsch, Payne, & Salas, 1996), the impact of pre-training information about the training programme on intention to transfer (Baldwin & Magjuka, 1991), or the preparation of the learning climate before the training (Salas et al., 2012) play important roles. While all these factors are important for the training transfer, the scope of this review did not allow us to include pre-training transfer. We suggest that future research and review efforts consider this highly important transfer stage.

Third, within the research framework, we did not attempt to study the impact of individual characteristics or training design on the transfer of soft skills training. Individual characteristics and training design influence transfer, but they have already been studied in more detail, and the results have led to optimised training designs. The main questions from practice and science lie in understanding the contextual factors that influence the application and post-training transfer of skills (Blume et al., 2010) because trainees not only must apply what they have learned in training to the job but also must maintain and enhance that application over the long term.

Fourth, the model does not distinguish between near and far transfer. Baldwin and Ford (1988) mention the dynamic nature of the transfer process: 'Unfortunately, most studies examining motivational factors and transfer have examined motivation from a static perspective, gathering information at one period of time' (Baldwin & Ford, 1988, p. 92). It is thought that the period of time on the job immediately after training is critical for transfer to occur (Noe, 1986). However, while immediate transfer is likely to be an important prerequisite for subsequent skill application, another key question concerns what helps to sustain the use of these trained skills. Moreover, Hesketh mentions that the 'methods of training that maximise immediate outcomes may do so at the costs of the long-term benefits of developing transferable skills' (Hesketh, 1997, p. 317). Simons (1999) uses a different conceptualisation of near and far transfer. According to him, in near transfer, there is a close connection between the learning situation and the work situation. In far transfer, the distance between learning and applying the behaviour at work is much greater. Near transfer, according to Simons, means focusing on practice and automatisation. Far transfer means focusing on decontextualisation and variety. For a post-training transfer model, this would mean that different measures (measuring different behaviours, differentiating between near and far transfer behaviours) are needed over time.

This leads to our fifth limitation, which is that the model is mainly focused on 'job behaviour', i.e., trainees applying something they have learned to a new situation in their work environment. Some studies assume that training affects not only job-related skills

but also other outcomes, which suggests that work performance and extra-role performance are not the only performance results (Koster, De Grip, & Fouarge, 2011; Yelon et al., 2014). Some authors suggest a broadening of the conception of transfer by, for example, including an emphasis on people's preparation for future learning (Van den Bossche & Segers, 2013) or even the use of a taxonomy of use that includes the 'use to perform', 'use to assess', 'use to explain', 'use to instruct' and 'use to lead' (Yelon et al., 2014) and is based on the assumption that for open skills, such as soft skills, graduates of the same training may elect to use the skills in different ways. Other authors assume that the transfer process is not a fully mediated stage model. For example, Vermeulen (2002) uses a two-way model of transfer. She assumes training transfer is a recurrent process of learning and performance that occurs both in the training context and in the work context. A similar approach is taken by Akkerman and Bakker (2011). These authors use the concept of boundary crossing to refer to ongoing, two-sided actions and interactions between learning and working contexts. It should also be noted that work performance and extra-role performance are aimed at different types of organisational outcomes. Work performance is aimed at high performance, whereas extra-role performance is aimed at high commitment (Boxall & Purcell, 2003). Rousseau and Greller (1994) mention that is it is not HR practice (in this case the soft skills training) in itself that determines whether an employee feels stimulated for high performance or high commitment; rather, it is the intervention as experienced by the employee. A model that incorporates internal and external environments, as well as the institutional and competitive perspectives, is the contextually based human resource theory (Paauwe, 2004).

5.6. Recommendations for future research

Based on the review, several key limitations in the literature on the transfer of soft skills training have been identified. These limitations encourage us to propose four recommendations for future research to address. First, more research on the complete-stage model is needed if we want to understand and optimise the post-training transfer process. One important question is whether the transfer stages are fully mediated by each preceding stage. Another question is what transfer results are measured and how these results differ by stage over time, which includes the question of how transfer initiation (the degree to which the trainee initiates or attempts to apply the training he or she has received on the job) differs from transfer maintenance (the degree to which the trainee persists in applying the training he or she has received on the job), as addressed by Laker (1990, p. 210).

Second, the supervisor has been found to have a crucial role in the transfer process, especially for soft skills training (Laker & Powell, 2011). However, it remains unclear how a supervisor should behave in each stage to achieve the best transfer results. Further research on this issue could help us understand the transfer process and optimise transfer results. The behaviours identified by Govaerts and Dochy (2014) could help clarify the most effective behaviours of supervisors. Additionally, Nijman (2004) has developed a classification of four types of supervisor support (instrumental, informational, appraisal and emotional). Applying such an approach to the post-training transfer process might help to explore the optimal roles and behaviours of the supervisor during the various stages of the post-training transfer process.

Third, transfer-enhancing interventions seem to influence transfer. However, it appears from our review that to study the effect of transfer-enhancing interventions, it is relevant to include mediator variables because the process through which these transfer-enhancing interventions seem to be mediated is either by changes in trainee self-efficacy or by changes in organisational culture. For example, Marx (1982) describes cognitive and behavioural self-control strategies designed to reduce the likelihood of relapse. These strategies include different coping responses (e.g., monitoring situations in which the transfer is at risk such as conditions of a high workload). These coping responses lead to increased self-efficacy. This increased self-efficacy regarding the use of new skills in a situation in which transfer is at risk in turn lead to a decreased probability of relapse in new, other risky situations (e.g., a colleague is not supporting the new behaviour). Regarding goal-setting, Latham and Seijts (1997) suggest that proximal goals should be set for maintenance and enhancement after training, and distal goals should be set for continuous learning regarding skill acquisition 1–3 years subsequent to the training. The proximal goals facilitate the identification of a series of controllable opportunities of modest size that produce visible results. These small wins are stable building blocks for high self-efficacy, which in turn has a direct effect on performance. More research on the relationship between these transfer-enhancing interventions and the mediator variables is needed to understand how these post-training interventions impact the various transfer stages and subsequently produce a certain level of transfer.

Finally, the amount of self-reported data raises validity questions (30 of the 34 studies used self-reports, and 20 studies used *only* self-reports). These self-ratings may be affected by social desirability, cognitive dissonance, and memory distortions (Chiaburu, Sawyer et al., 2010). According to Taylor et al. (2009), the use of only trainees' self-ratings in evaluations of training transfer may lead to overly optimistic assessments of transfer results. This potential bias is particularly the case for soft skill trainings because the performance norms are often more subjective. Thus, there is a need for empirical research on both the transfer stages and the work factors that uses multiple data sources. To the extent of our knowledge, there is not yet any research on the transfer of soft skills training in a work context that includes both multiple measures in time, multiple data sources and multiple outcomes.

5.7. Implications for practice

The inability to transfer results from soft skills training is an extremely costly waste of time, energy and money. What happens in the training is not the only thing that matters. A focus on what happens after the training should be as important. Steps should be taken to ensure that trainees are motivated to transfer the soft skills they practised during the training and feel the opportunity to use their skills once on (or back on) the job. The stage model may help organisations to identify at what stage transfer fails or could fail and modify relevant work factors to be more supportive towards training transfer. For example, if a trainee is motivated to use soft

skills after training, but the actual use of the skills fails, workload and supervisor support might hinder the transfer. A high workload might simply block the trainee from starting to use the new skills, and support from a supervisor might be completely missing or not include the relevant behaviours (Govaerts & Dochy, 2014; Nijman, 2004). Taking the relationships between the post-training transfer process and the work factors seriously might help organisations to optimise the transfer results of soft skills training and thus contribute to the need for such skills in today's workforce. Based on our review, some practical advice can be provided. First, in all transfer stages, it is important that the trainee understands the relevance of using the new skills in his or her work. Employees should understand how using the new skills can influence their performance. During post-training transfer, both managers and peers can play an important role in explaining this relevance, for example, by giving examples of how using the skills leads to improved performance. Managers and peers can also support and coach the trainee when s/he tries to use the new skills. Feedback on the use of the skills is crucial in this stage. Are the new skills used in the proper manner? Second, a manager should realise that s/he is a role model for the trainee. If a manager is not using the skills in the correct manner, this will reduce the chance that the trainee will start using the skills in the proper way. Third, making trainees aware of the relapse process of transfer is an important first step in relapse prevention. Tell trainees that transfer will be hindered by work factors and that it will be a challenge to overcome them. Fourth, an organisation should realise that the overall learning culture might overrule transfer attempts. If a trainee is not allowed to try new behaviour, make errors and learn from them (e.g., if making an error will lead to 'punishment'), the chance that trainees will start using the new behaviour is small. In general, if 'old' behaviour is more rewarding than new behaviour, nothing will change after a training.

6. Conclusions

While there is growing evidence that investments in training lead to demonstrable results that positively affect individual and organisational performance (Arthur et al., 2003; Tharenou et al., 2007), we need to continue to increase our understanding of the factors that influence the application and transfer of training. This study demonstrated that different transfer stages are relevant after soft skills training and that the work environment, defined in terms of job-related factors, social support and the organisational facilitation of learning, is directly related to the transfer of soft skills training. However, the effects of specific factors vary by transfer stage. This review synthesises what we know to date, and our hope is that the findings transfer to more precise and impactful transfer investigations as well as to more effective training practice. Future research that pursues this line of inquiry is necessary if we are to move beyond the question of whether training works to the more important question of why training works.

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